

### III. Do IBM's Keyboards Suffer from Defective Design?

Plaintiffs argue that the evidence clearly demonstrates the minimal requisite of the existence of some defect in defendant's product taken as a whole, regardless of whether their proposed liability experts are allowed to testify. According to Bowers and Allen, with respect to a question of design defect, a plaintiff need not even identify with specificity any particular feature or component of the product that is defective. D.I. 322 at 33. See generally *Towe v. Justis Brothers, Inc.*, 290 A.2d 657, 658 (Del.Super. 1972); *Voss v. Black & Decker Inc.*, 59 N.Y.2d 102, 463 N.Y.S.2d 398, 450 N.E.2d 204 (1983).

Defendant counters that the record provides no support for plaintiffs' allegations of a defective keyboard design by IBM, and that [\*137] plaintiffs' reliance on Towe for the proposition that they need only establish a defect in the product "taken as a whole" is misplaced. Specifically, Towe merely states that [HN29] on a motion to dismiss, as opposed to summary judgment as the case at bar, a plaintiff must only show some evidence of a defect, a minimum proffer plaintiffs have failed to satisfy." n44 D.I. 334 at 16, n.29.

n44 Plaintiffs' reliance upon Towe is completely unsubstantiated. As previously noted in IBM's argument, Towe addressed a motion to dismiss a breach of warranty claim under Super. Ct. Civ. R. 12(b)(6), which is similar to *Fed. R. Civ. P. 12(b)(6)*, wherein the Superior Court interpreted the application of its rule finding that [HN30] a complaint will only be dismissed for failure to state a claim if "under no set of facts which could be proven to support the claim asserted would plaintiff be entitled to relief." *Towe*, 290 A.2d at 658. This interpretation is similar to this Circuit's application of Rule 12(b)(6). *Conley v. Gibson*, 355 U.S. 41, 45-6, 2 L. Ed. 2d 80, 78 S. Ct. 99 (1957); *Colburn v. Upper Darby Twp.*, 838 F.2d 663, 665-66 (3rd Cir. 1988) quoting *Estate of Bailey by Oare v. County of York*, 768 F.2d 503, 506 (3rd Cir. 1985). Although the plaintiffs in Towe had not spelled out "all of the details of their cause of action," their complaint would not be dismissed at the initial stages of the action because it gave "general notice as to the nature of the claim asserted against defendant." *Id.* This is not the standard for Rule 56 which requires a showing of a genuine issue of material fact, as discussed at pp. 7-8 herein.

[\*138]

The Court agrees with defendant. It is well recognized that [HN31] in a negligence case under Delaware law, a plaintiff must establish a duty, breach of that duty, proximate cause and damages. See *Hubscher v. Pantzer Management Co.*, 1995 U.S. Dist. LEXIS 13921, C.A. No. 93-244-SLR, slip op. at 4 (D.Del. Aug. 25, 1995); *Croom v. Pressley*, 1994 Del. Super. LEXIS 385, C.A. No. 93C-01-026, slip op. at 4 (Del.Super. Jul. 29, 1994). These elements must be established by a plaintiff in both "defective design" and "duty to warn" claims in a product liability action. *Macey v. AAA-1 Pool Builders & Serv. Co.*, 1993 Del. Super. LEXIS 152, C.A. No. 88C-JN-10 (Del.Super. Apr. 30, 1993). Proof that a product is defective necessitates more than merely showing that the product brought about an injury.

While the potential presence of a defect in IBM keyboards is a matter of first impression in this Court, the New Jersey court in Schneck, and more recently in *Reiff v. Convergent Technologies*, 957 F. Supp. 573 (D.N.J. 1997), considered whether the plaintiffs had met their burden of establishing a design defect in computer keyboards. Schneck Op. at 3; Reiff, Op. at 9-14. Significantly, the respective New Jersey and Delaware laws applicable to product [\*139] design defects are remarkably similar. To wit, [HN32] under New Jersey law, in order for a plaintiff to establish a design defect, he must prove that the product was not "reasonably fit, suitable or safe for its intended purpose because it . . . was designed in a defective manner." Schneck at 3. A "risk-utility analysis" must be applied, with the result that a manufacturer is held liable only "if the danger posed by the product outweighs the benefits of the way the product was designed and marketed." Schneck at 4. In other words, to establish a product defect under New Jersey law, proof of either a design defect, a manufacturing defect or an inadequate warning defect, which renders the product unfit, unsuitable or unsafe for its intended or prescribed purpose must be established. Reiff, at 9. Similarly, in Delaware, a product is defective in design where it is not reasonably fit for its intended purpose and where the design has created a risk of harm which is so probable that an ordinary prudent person, acting as the product's manufacturer, would pursue a different available design to substantially lessen the probability of harm. *Dillon v. General Motors Corp.*, 315 A.2d 732, [\*140] 736 (Del.Super. 1974), aff'd, 367 A.2d 1020 (Del.Super. 1976); *Nacci v. Volkswagen of Am. Inc.*, 325 A.2d 617, 620 (Del.Super. 1974).

The Schneck court found that plaintiffs had not "stated how . . . the IBM machines are defective." n45 Particular emphasis was placed on Kroemer's failure to identify a defect present in the keyboards used by plaintiffs:

While Dr. Kroemer discusses design defects in "conventional keyboards," his testimony fails to include any reference to or discussion of specific design defects in the IBM machines. Rather, Dr. Kroemer discusses the three general "defects" of "the conventional keyboard." According to Dr. Kroemer, the defects of the conventional keyboard are: too many keys; unergonomic arrangement of keys; and insufficient space to rest wrists. *Id.* However, all three alleged defects are sufficiently generic that Dr. Kroemer apparently feels he can testify about them without having ever examined the IBM machines used by Mrs. Schneck, inspected the workstation at which she used the IBM machines, or observed her keying techniques.

Schneck at 11.

Similarly, the court in Reiff determined no bridge was provided by [\*141] plaintiffs expert, Dr. Hedges, between noncompliance with industry or design specifications and liability under New Jersey product liability law stating that "products that fail to meet these [ANSI] or other such standards may well be defective in the engineering sense, but are not necessarily defective in the products liability sense." Reiff at 11.

*n45* In a number of recent decisions, this jurisdiction and others have rejected similar design defect claims. To wit, in *Finley v. NCR Corp.*, the court granted summary judgment to defendant on plaintiffs' design defect claim, where plaintiffs' experts failed to establish a verifiable scientific link between keyboard use and *CTS. 964 F. Supp. 882 (D.N.J. 1996)*. The Fourth Circuit ruled likewise in *Mastalski v. IBM Corp.*, where it upheld the district court's grant of summary judgment in favor of IBM against plaintiff's claim of injury due to defective design of her IBM keyboard. *1992 U.S. App. LEXIS 20730, \*21, 1992 WL 207789, at \*6* (4th Cir. 1992). Finding that plaintiff's expert had failed to establish any scientifically verifiable link between keyboard use and plaintiff's injury, the Mastalski court concluded that "an injury resulting from a requirement to maintain long hours and a fast pace would be more akin to harm from the over consumption of an otherwise relatively safe and non-defective product, such as a tennis racquet." *Id.*

[\*142]

Plaintiffs in the case sub judice likewise fail to identify any defect in the design of IBM keyboards, either generally or with particular regard to the actual keyboards used by Allen and Bowers. Assuming, arguendo, that *all* of plaintiffs' proffered liability experts were deemed satisfactory under Daubert/Paoli II to offer testimony, there is still no evidence that specifically identifies and addresses any alleged keyboard defects demonstrating that the keyboards in question were not fit for their intended purposes. Nor does the record suggest that the IBM products at issue failed to comport with the standards of a reasonably prudent manufacturer. *n46* Significantly, the aforementioned experts, in particular Kroemer and Cunitz, did not even examine plaintiffs' keyboards, workstations, types of tasks performed or typing techniques. Although Kroemer's report of August 1995 (D.I. 352, Ex. 78) was admitted during the *in limine* hearing, it provides very limited information regarding QWERTY or conventional keyboard design. Upon review, the report addresses in general five "groups of concerns" regarding keyboard designs, which in essence fall within the broad categories [\*143] addressed in Schneck. *n47* Further, as noted by Kroemer during his *in limine* hearing in this case:

Keyboard use is, of course, a rather complex issue. One would have to probably observe persons operating keyboards.

\* \* \*

That would require a -- an observation of a person or persons performing *one or several jobs*.

D.I. 359 at 161 (emphasis added).

Moreover, to evaluate the keyboard in question, measurements should be taken, in addition to a comparison with other *similar* keyboards. D.I. 359 at 164-165, 167-171. These measurements are necessary to compare the distance between key centers with standards, to know the space displacement characteristics of the keys, to determine the tilt or angle involved, to ascertain that the majority of the keys are at elbow height of the operator for comfort of use and if the potential operators are unknown, to determine adjustment angles as compared with various elbow heights. D.I. 359 at 168-170.

*n46* Plaintiffs further fail to identify those applicable standards and IBM's alleged subsequent deviation therefrom.

n47 Those broad categories were too many keys, unergonomic arrangement of keys and insufficient space to rest wrists. Schneck at 11.

[\*144]

Keyboard use, one of the five factors employed by Kroemer in his evaluation, requires the evaluator to not only visually observe the operator, but also to take certain measurements over a period of time, which include the extent and intensity involved in performing a particular task, the relationship and availability of rest breaks in completing the work, the number of strokes performed, and the actual activation of keys being applied by the operator in comparison to design values. D.I. 359 at 171. As a result, Kroemer's analysis of the presence of design defects and the relationship to the development of repetitive stress injuries in general require both observation of the operation and measurements of the keyboards in question, neither of which occurred in this case. D.I. 359, 158-159.

In addition, it is abundantly clear that keyboard use by the operator, including posture, positioning of the upper limbs and fingers, and stroke pressure applied play a significant role in the development of repetitive stress complaints and injuries, which are not related to the function or design of the keyboard. D.I. 310, Ex. 21 at 116; D.I. 363 at 19-20, 52, 91-92, 94, 125-27.

While plaintiffs [\*145] submit patent applications of alternative design keyboards to apparently suggest that there are more ergonomically appropriate alternatives in existence, plaintiffs' experts do not attest to the virtues of such designs. Further, there is no suggestion therein that the available alternatives would have prevented the injuries allegedly suffered by plaintiffs. D.I. 325, Ex. 32, 33, 34, 35. Indeed, plaintiffs' causality expert, Bleeker, admitted that "alternative" design keyboards were new, and that consequently there are no studies which reflect whether these designs would prevent or lessen incidents of CTS. D.I. 310, Ex. A-90 at 330-32. n48 Thus, the record simply does not support plaintiffs' claim of the existence of a defect in IBM's keyboards which allegedly caused the incurred CTS injuries, and that the risk of harm was so probable that a manufacturer should pursue an alternative, available design which would substantially lessen the probability of that harm. *Nacci*, 325 A.2d at 620. n49

n48 As can best be discerned from the record, Bleeker's comments would include the type of alternative keyboard designs and studies discussed by Kroemer. D.I. 359 at 150-152, 155.

[\*146]

n49 As emphasized in Reiff, the existence of alternative designs, such as split-angle keyboards, alone without ergonomic or medical literature demonstrating such devices either reduce typing discomfort or the risk of developing musculoskeletal injuries, are insufficient to prove design defect. Reiff at 13-14.

#### IV. Did Defendant Have, and Breach, a Legal Duty to Warn?

Plaintiffs purport that defendant knew or should have known about all potential dangers of its keyboards to users and foreseeable misusers -- as evidenced by IBM internal documents suggesting company recognition of the allegedly hazardous relationship between continuous, repetitive keyboard use and CTS, and had a legal duty to warn which steps must be taken to avoid *possible* harm. n50 See, e.g., *Graham v. Pittsburgh Coming Corp.*, 593 A.2d 567, 569 (Del. Super. 1990). Where defendant failed to provide the appropriate warning, the company is liable for the injuries incurred by the plaintiffs. D.I. 322 at 33.

n50 Plaintiffs recite a litany of IBM internal memoranda and company-sponsored studies which examine and address the increased incidence of repetitive stress injury ("RSI") among keyboard operators. It is clear that plaintiffs view this evidence as "the smoking gun." D.I. 322 at 6-15. While the Court in no way shares this perception, as shall be elaborated upon forthwith, plaintiffs' proffers are highlighted. To wit: (1) a 1990 IBM publication discusses carpal tunnel syndrome and its potential relationship to keyboard work *and* workstation design. D.I. 323, Ex. 5; (2) in 1984, an IBM VDU Task Force reported on the increased incidence of RSI among Australian keyboard operators. D.I. 323, Ex. 6 and 7; (3) an IBM senior engineer associated "the CTD problem" to "keyboarding with VDT's" (D.I. 323, Ex. 10), and acknowledged that "repetitive motion trauma" puts IBM at risk for "increased [legal] exposure" as a result of "increased general awareness." D.I. 323, Ex. 11; and (4) Richard S. Hirsch, Ph.D., a manager of IBM's Human Factors Engineering Department, appeared before nationwide legislative bodies in the 1980s, representing that the use of VDTs was absolutely safe and that IBM's own employees had many years of experience using VDTs with no resulting adverse health effects, although Hirsch was cognizant of the alleged connection between the reported ail-

ments and keyboard engineering and design. D.I. 323, Ex. 14. Plaintiffs also argue that, in addition to what IBM actually knew about the relationship between VDTs/keyboard use and RSIs, IBM *should have known* about the general propensity of its computer keyboard products to cause such injuries as suffered by Allen and Bowers in light of the expert reports available on the subject and defendant's own internal experiences. Specifically: (1) recognized epidemiologist Dr. Stephen Zoloth had compiled a report establishing that medical and scientific literature dating back several decades contained numerous learned articles by respected authorities which discussed the severity of injuries resulting from keyboard use. D.I. 324, Ex. 21; and (2) IBM's former Director of Health, Dr. O.B. Dickerson, purportedly acknowledged significant numbers of upper tenosynovitis cases resulting from operation of the current [QWERTY] keyboard, which caused unnecessary tension on the hands, wrists and forearms and could be redesigned to reduce such medical symptoms. D.I. 324, Ex. 23. Finally, noted RSI authority Dr. Emil Pascarelli has testified that design flaws contributing to CTS-type injuries occur generally in all manner of QWERTY designed keyboards (such as those manufactured by IBM), and that RSI to a significant degree is entirely preventable if the keyboard user is *given appropriate warnings* regarding rest breaks, ergonomic workstation setup and typing technique. D.I. 324, Ex. 22.

[\*147]

Defendant counters that it had no duty to warn because there is nothing inherently dangerous about its keyboards, and a manufacturer's legal duty to warn purchasers about a particular product arises only if there is an inherent danger in the product. *Betts v. Robertshaw Controls Co.*, 1992 Del. Super. LEXIS 528, C.A. No. 89C-08-028, slip op. at 5 (Del. Super. Dec. 28, 1992). Courts overwhelmingly have held that [HN33] keyboard manufacturers have no duty to warn, particularly where a plaintiff's use of a keyboard in a repetitive and rapid manner -- thus potentially resulting in symptoms associated with carpal tunnel syndrome -- is characteristic not of the keyboard, but of that plaintiff's work habits. See, e.g., *Finley v. NCR Corp.*, 964 F. Supp. 882, slip. op. at 11-14 (D.N.J. 1996); *Doll v. Digital Equipment Corp.*, 1996 U.S. Dist. LEXIS 2754, C.A. No. 93-CV-0359E(M), slip op. at 7-9 (W.D.N.Y. Mar. 1, 1996); Reiff at 14-17. Moreover, in order for a failure to warn claim to succeed, a plaintiff must also offer sufficient evidence indicating that the lack of an adequate warning was a proximate cause of the claimed injuries. Id. Where

in this instance plaintiffs have failed to prove such proximate cause, relying on their [\*148] warnings expert's "vague allegations that repetitive use of the product, or the positioning of the product being used, is the cause of their injuries," plaintiffs' failure to warn claim must be dismissed. D.I. 309 at 30-34.

Defendant's argument is persuasive. Delaware law pertaining to the duty of a manufacturer to warn purchasers of inherent dangers in its products follows the *Restatement (Second) of Torts* § 388 (1965), which provides that [HN34] a manufacturer's warning to a third person is required when it:

(a) knows or has reason to know that the chattel is or is likely to be dangerous for the use for which it is supplied, and (b) has no reason to believe that those for whose use the chattel is supplied will realize its dangerous condition, and (c) fails to exercise reasonable care to inform them of its dangerous condition or of the facts which make it likely to be dangerous.

*Betts*, slip. op. at 4 (quoting *Restatement (Second) of Torts* § 388 (1965)).

Delaware courts interpreting this provision have held that "[HN35] the standard for determining the duty of a manufacturer to warn is that which a reasonable (or reasonably prudent) person engaged in that activity would have [\*149] done, taking into consideration the pertinent circumstances at that time." n51 *Graham v. Pittsburgh Coming Corp.*, 593 A.2d 567, 571 (Del. Super. 1990). Delaware courts have further held that a manufacturer is not required to warn a consumer about potential harm which is open and obvious to the user of the product. *Farm Family Mut. Ins. Co. v. Perdue, Inc.*, No. 416, 1990, 1992 Del. LEXIS 27 at \*5 (Del. Supr. Jan. 2, 1992) ("Under Delaware law, the duty to warn extends only to those who can reasonably be assumed to be ignorant of the danger.").

n51 Under Delaware law, the existence of a duty to warn is a question of law for the court. *Macey v. AAA-1 Pool Builders and Serv. Co.*, 1993 Del. Super. LEXIS 152, C.A. No. 88-C-JN-10, slip op. at 5.

Moreover, "[HN36] there is no duty to warn about the physical manipulation inherent in the use of certain objects which can in some persons and under some circumstances cause CTS." *Finley*, Civ. No. 92-5242, slip

op. at 12 (citing *Creamer v. IBM Corp.*, 877 F.2d 54, slip op. at 6-7 (3rd Cir. [\*150] May 18, 1989)); see also Reiff at 14-15; Schneck at 58; Doll, C.A. No. 93-CV-0359E(M), slip op. at 8; *Hopkins v. NCR Corp.*, 1994 U.S. Dist. LEXIS 17273, 1994 WL 757510 at \*9 (M.D.La. 1994), aff'd, 53 F.3d 1281 (5th Cir. 1995). Therefore, the threshold issue for consideration in such a case is "whether plaintiffs have proffered sufficient evidence to establish that the alleged danger is not simply the repetitive motion required to use defendant's products. If plaintiffs cannot make such a showing, then their failure to warn claim must be dismissed as a matter of law because defendants would have no duty to warn against any such danger." Schneck at 58. See also *Griesenbeck v. American Tobacco Co.*, 897 F. Supp. 815, 820 n.3 (D.N.J. 1995) ("Without a duty to warn, there cannot be any failure to warn.").

Thus, in Hopkins, the court dismissed the plaintiff's claim that the operation of a proof encoder n52 caused her to develop CTS, opining that there was no particular characteristic of the machine which directed the manner by which the plaintiff used the machine. 1994 WL 757510 at \*9. Consequently, the defendant machine manufacturer could not be held liable for a failure to warn, as [\*151] "the mere fact that plaintiff in this manner had to perform rapid, repetitive manual tasks in order to operate the proof encoder, standing alone, can not (sic) give rise to a duty to warn that such activities could cause CTS." Id. Applying the analysis performed by the Creamer court, which dealt with the issue of CTS allegedly resulting from the use of a grocery checkout scanner, the Hopkins court recognized that repetitive motion "may indeed be the cause-in-fact of plaintiff's CTS," but significantly refused to determine it to be "the proximate cause of plaintiff's CTS," articulating that:

Such a holding [that there was proximate cause] would necessitate a warning on any object that involves extended manual manipulation inherent in the ordinary use of the object. For example, sport equipment, computers, video games, remote controls, calculators, musical instruments, appliances, garden tools, writing utensils, kitchen utensils, workman's tools, and indeed, Creamer's exemplar milk cow, would all be deemed "unreasonably dangerous" products.

Id. See also Creamer, No. 89-1026, slip op. at 6-7.

n52 A proof encoder is a device used by banks to encode information on checks. *Hopkins*, 1994 WL 757510, at \*1.

[\*152]

In fact, other courts addressing this issue have followed the aforementioned rationale, holding that there is no duty to warn the users of equipment where the alleged injury results simply from overuse of the product. To wit, the Doll court found no duty to warn about the alleged dangers associated with the use of the defendant's keyboard. C.A. No. 93-CV-0359E(M), slip op. at 8-9. According to the Doll court,

The fact the plaintiff may have used the defendant's keyboard in a rapid and repetitive fashion is a characteristic not of the keyboard but of the plaintiff's work habits and, possibly, the requirements placed upon her by her employer. The defendant is not an insurer for such activity, or responsible for such. Hopkins, *supra*, at 19. Were it so, every carpenter would have a claim arising from every hammered thumb, golfers would spend more time in litigation than on the links and pianists would strive to get to court rather than to Carnegie Hall.

Id. at 7. See also Finley, Civ. No. 92-5242, slip op. at 11 ("To declare that keyboards are not reasonably safe seems inappropriate in a society in which toys sold for the amusement of children are potentially [\*153] more dangerous.").

This rationale was recently affirmed in Reiff wherein the district court noted "products whose use require physical activity often entail a risk that such use will cause harm," that harm is from the manner of use, rather than from the product itself. In explaining the concept of use versus the product itself by the analogy to a snow shovel, Judge Irenas commented "For the same reasons, the law does not and ought not require that computer keyboards contain warnings relating to a keyboard's use in a particular way, by a particular person with particular physical characteristics and work habits."

In the case at bar, plaintiffs offer no evidence to suggest that defendant bore a duty to warn about the dangers associated with its keyboard use under Delaware law, and then breached such duty. Plaintiffs merely set forth vague allegations that the repetitive use or their manner of use of the IBM keyboard, or the positioning of the keyboard while being used, resulted in injury. Indeed,

when queried about what was injurious about the keyboards at issue, plaintiffs' warning expert, Dr. Robert Cunitz, responded that a number of factors totally unrelated to the keyboards [\*154] themselves contributed to plaintiffs' medical problems:

Q: You're talking about a combination of the chair in which the user sits, the table or surface in (sic) which the equipment is placed, the location or angle of some of the equipment, the location of the screen, all those factors?

A: Right.

Q: Any other?

A: There are other factors that I -- that I know we left out, which is lighting.

D.I. 310, Ex. A-120-21.

Cunitz also testified:

A: . . . it's one thing to design a keyboard that by itself feels comfortable and easy to use. I think your clients [IBM] have probably done about as good a job doing that, at least in my professional experience, as a layperson, that they seem to do very well at that. So it's comfortable. At least so it seems.

D.I. 310, Ex. A-120. n53

n53 Further, according to Bleeker, when performing an ergonomic analysis, she considers posture, positioning of the upper body, including the extremities, back, shoulders and head, layout of the workstation, availability of break time versus continuous typing, amount of muscle force employed, other types of work activity, intensity, repetition, and other factors -- in determining the contribution to and the alleviation of upper extremity disorders, such as carpal tunnel syndrome. D.I. 353 at 15-19. As noted previously herein, such testimony is insufficient to prove the legal requirement that "the risk associated with the use of defendant's product is something more than the physical activity required to use it." Reiff at 16.

[\*155]

Interestingly, neither Cunitz nor plaintiffs' other liability experts examined, or tested the IBM keyboards at issue to determine any possible defects. They also made no effort to quantify the number of keystrokes per period of time used which allegedly resulted in plaintiffs' injuries, or to observe plaintiffs' working at the IBM keyboards to support their conclusions about the ergonomics of plaintiffs' workstations or plaintiffs' posture, while typing. Given this unexplained circumstance, and in light of the aforementioned testimony by warnings expert Cunitz, who admittedly only *assumes* that a warning would have prevented the injuries, n54 the Court must conclude that plaintiffs' injuries resulted from the repetitive motion involved with typing on the IBM keyboards. As such, where this scenario is essentially no different than those presented in Schneck, Finley, Creamer, Reiff, Doll, and Hopkins, the Court is compelled to find similarly, that: (1) defendant's keyboards are not inherently dangerous instrumentalities, where the only "danger" associated with the keyboard use is the continuous repetitive motion and (2) that defendant consequently is under no duty to warn [\*156] about the keyboard use, where Delaware law imposes no "warning" obligation regarding "the physical manipulation inherent in the use of certain objects which can in some persons and under some circumstances cause CTS." Also see Schneck Op. at 63-64 (citing Creamer, slip. op. at 6-7).

n54 And, in fact, none of plaintiffs' remaining experts can say, within a reasonable degree of medical certainty, that some undefined warning would have prevented the particular medical problems suffered by plaintiffs.

As a final comment, it again should be noted that [HN37] under Delaware law, a defendant is not required to warn a consumer about potential harm which is open and obvious to the product's user. *Farm Family Mut. Ins., 1992 Del. LEXIS 27* at \*5. The Finley court addressed this issue with regard to keyboard use and injury thusly: ". . . warning persons from using keyboards beyond a tolerable level of pain seems beside the point. Like most things that produce pain, it should be self-evident that a pain-producing [\*157] activity is a threat to health." Finley, slip op. at 11. See also Doll, slip op. at 8 ("the defendant was not required to warn against the open or the obvious").

**V. Did the Use of Defendant's Keyboards Proximately Cause Plaintiffs' Injuries?**

As previously discussed, [HN38] in a negligence action or products liability claim, the plaintiff must prove all elements of the claim, including that of proximate causation. The establishment of proximate cause "requires that the plaintiff prove that but for the *tortious* conduct of the defendant, the injury which was suffered would not have occurred." Hubscher, slip op. at 4 (emphasis added). Plaintiffs maintain that the CTS symptoms incurred resulted from the use of defendant's allegedly *defectively designed* keyboard, as evidenced by their causation expert, Bleeker, who concluded causation from the strong temporal association between the plaintiffs' use of the keyboards in question and the onset of symptoms. However, as discussed in the preceding sections, before addressing causation, there must be a finding of a duty owed and a breach of that duty -- in other words, there must be evidence of defective design and a duty to [\*158] warn. In light of this Court's previous findings of an absence of either defective design or duty to warn, the issue of proximate cause need not be addressed. n55

n55 Parenthetically, the Court notes that Bleeker's testimony, although satisfying the Daubert/Paoli II test of admissibility may not meet the legal standard of proximate cause. For example, as noted previously herein, Bleeker's testimony that plaintiffs' CTS developed from keyboard use primarily rests upon a temporal association between increased typing and development of their respective symptoms. Further, she recognizes a number of other factors that contribute to the development of CTS. D.I. 310, Ex. A-73 at 298; D.I. 353 at 15-19. [HN39] While a temporal association is sufficient for accepted scientific methodology, reliability and fit under 702, it does not necessarily equate to proximate cause. Being a substantial factor may meet scientific methodology considerations but does not meet the "but for" requirement of proximate cause. *Culver v. Bennett*, 588 A.2d 1094, 1096, 1098 (Del. Supr. 1991).

[\*159]

## VI. Related Issues

As highlighted previously herein, plaintiffs heavily emphasize defendant's knowledge of the alleged hazards of keyboard use, acquired from internal and external studies and internal worker's compensation claims for RSI injuries. D.I. 322 at 6-12. IBM does not disclaim its longstanding cognizance that repetitive use of keyboards may result in upper extremity fatigue and injury. n56 Indeed, the company actively sought such inquiry. Nor does IBM challenge plaintiffs' assertion that other key-

board manufacturers have provided instructions and warnings regarding keyboard use. D.I. 334 at 3-6. Rather, IBM claims that the documents cited by plaintiff are not dispositive evidence of design defects in the IBM keyboards at issue and a duty to warn on the part of IBM. D.I. 334 at 4.

n56 As was pointed out by defendant and recalled by the Court, during at least one status/discovery conference, IBM represented a willingness to stipulate to such knowledge and information.

These documents cited and [\*160] relied upon by plaintiffs will be discussed seriatim.

### Exhibit 5.

This exhibit (D.I. 323) appears to be an article related to the safety reports of visual display terminals (VDTs) addressing a number of possible health concerns, including radiation exposure, vision, cumulative trauma, skin disorders, and other matters. Specifically, at pages 12 and 13, in a question and answer format, it discusses CTD, RSI and CTS. n57 Although this brief Q & A addresses keyboard use, it emphasizes positioning, posture, workplace design and proper set up. The article specifically states that "VDT keyboards, *per se*, do not cause work disorders [CTS]," but relates the development of such condition to any prolonged repetitive motion, noting that prevention may be accomplished through appropriate workstation design and body positioning. As evident from this article, there are numerous issues regarding CTDs and keyboard use. In fact, they are infinite as evidenced from the materials submitted in this matter, in particular the various abstracts by Cunitz. Nothing in the exhibit identifies scientific evidence supporting a causal connection between the keyboard and carpal tunnel syndrome. At the most, [\*161] the exhibit represents an effort to provide guidance on what a VDT user could do to be comfortable in the workplace. Therefore, the article does not exhibit a causal relationship between keyboard use and carpal tunnel syndrome, and is irrelevant to the issues under consideration.

n57 CTD (cumulative trauma disorder), RSI (repetitive stress injury), and CTS (carpal tunnel syndrome).

### Exhibits 6 and 7.

These two exhibits (D.I. 323) are essentially the same and are 1984 summaries discussing the Australian experience. They fail to establish a causal relationship

between keyboard use and CTS. Further, the language cited by plaintiffs' counsel is followed by such qualifying comments:

The occurrence of the disease [tenosynovitis] is not universal, and individual susceptibility *may depend on many general health and environmental factors.*

D.I. 323, Ex. 6; Ex. 7 at 8 (emphasis added).

Further, these same exhibits were submitted in the Schneck case with that court noting that "the perception [\*162] that workers were suffering injury due to keyboard operation ultimately proved to be false in Australia," relying upon an extensive study in the September 7, 1987 issue of *The Medical Journal of Australia*. Schneck at 56-57. Therefore, not only do these exhibits reference a multifacet condition arising as a result of a number of factors, the findings were subsequently determined to be inaccurate. Unidentified are any design defects or proof that keyboards are likely to be dangerous for the use for which they are supplied.

#### Exhibit 9.

This exhibit (D.I. 323) contains two internal memoranda regarding the issue of RSI in Japan. They discuss the Japanese Ministry's guidelines regarding VDT operation, IBM's response to those suggestions, and translation concerns. The isolated and incomplete quote lifted by plaintiffs from the memos does not constitute an admission that IBM Japan deliberately suppressed safety guidelines. The memoranda only concern VDT operations in Japan and the guidelines identified therein only address VDT use in general. No relationship is established between keyboard use and injury. Again, for the reasons discussed in Exhibits 6 and 7, this exhibit does [\*163] not establish a design defect or a duty to warn, nor an admission of either.

#### Exhibit 8.

Within this exhibit (D.I. 323) is a lengthy discussion of the legal avenues available to a plaintiff under Australian law, but fails to even speculate as to the cause or causes of RSI. Nor does it articulate any legal obligation to warn IBM employees or others about VDT use under Australian law or any other country's law, including the states within the United States.

#### Exhibit 10.

Exhibit 10 (D.I. 323) involves a letter and series of memoranda related thereto in which an IBM employee attempted to obtain a grant from IBM to Ohio State Uni-

versity to determine the genesis of CTD and provide "technical parameters for change in workstation design, tools, methods and processes to combat CTD." The focus of the related memoranda and exhibits are on RSI type conditions occurring in supermarket employees using optical scanners. Plaintiffs' limited quote from this exhibit is taken completely out of context and provides no proof or admission of a design defect or duty to warn.

#### Exhibit 11.

The majority of this exhibit (D.I. 323) relates to the development of RSI in supermarket employees using [\*164] optical scanners. Plaintiffs' minimal quote is again taken out of context and is clearly irrelevant to the issues herein. For the reasons expressed in relation to Exhibit 10, this does not show either defective design or an obligation to warn.

#### Exhibit 12.

These documents discuss IBM's funding of an ergonomics research program in the grocery industry. Contrary to plaintiffs' representations, rather than the quoted language being IBM's concern of "hiding behind," its lawyers regarding *RSI occurrence with grocery check-out employees*, this statement made by a third party was simply designed to induce IBM to contribute to the Food Marketing Institute's research efforts. Again, this exhibit is also irrelevant.

#### Exhibits 13 and 14.

These two exhibits (D.I. 323) are related, at least from the plaintiffs' perspective, and include testimony at state hearings in 1983 on health and safety questions of VDTs (Ex. 13) and the deposition testimony of Dr. Hirsch (Ex. 14), during which he was cross-examined about this testimony. Neither of these documents establish a design defect nor a duty to warn. Apparently, they are cited by plaintiffs, as the previous exhibits are, in support of [\*165] the proposition, of the safety concerns regarding VDTs and IBM's awareness of the RSI issue and alternative keyboards. First of all, exhibit 13 addressed not only musculoskeletal stress, but also the concerns related to potential radiation exposure and vision, as well as the studies related thereto. The comments made therein show that a number of factors contribute to workplace comfort or discomfort, unrelated to the work tool itself, and are not inconsistent with the previously examined testimony of plaintiffs' experts. At most, this testimony attempts to "set out the complex issue of what had commonly become known as 'repetitive stress injury' (RSI) or 'cumulative trauma disorders' (CTDs)." Schneck at 52-53. It reflects that for this complex issue, there is no single solution, but rather a host of considerations, most of which are directed to modifications of the working environment. Exhibit 13 does not constitute as an

admission that VDTs, including the keyboard, were dangerous.

Exhibit 14 is used by plaintiffs to support their argument that Dr. Hirsch, an employee of IBM in its Human Factors Engineering Department, was aware that the alternative split keyboard design alleviated [\*166] injuries. No where in the deposition, in particular at the cite referenced by plaintiffs, does Dr. Hirsch admit that he knew that the alternative split keyboard design reduced or eliminated injuries. Further, plaintiffs' own expert, Dr. Bleeker, in addition to enumerating a plethora of elements producing RSI, testified that there is no scientifically recognized study confirming that such a design will alleviate or reduce RSI. Moreover, exhibit 14 was not authored by Hirsch. D.I. 323, Ex. 14 at 63. And, although Dr. Hirsch stated the unrefuted and admitted awareness by IBM of some relationship between RSI and keyboard use, he also maintained that the relationship between hand and arm pain and keyboard design was poorly understood. D.I. 323, Ex. 14 at 169-70. In fact, his personal understanding of that relationship was "there may be no - or minimal - connection between the reported ailments [RSI] and keyboard engineering." Id.

#### Exhibit 15.

This exhibit (D.I. 324) contains the provisional statements of the WHO (World Health Organization) on occupational health hazards in the use of visual display units (VDUs) resulting from a conference held in Geneva, Switzerland, December 2-6, [\*167] 1995, during which the following working agenda was considered and adopted: (1) the definition and classification of VDUs, (2) user characteristics, (3) review of *alleged* problems and biological explanation of health related disorders, (4) measurements of potential hazards, (5) prevention and control strategies, and (6) conclusions and recommendations. The health concerns addressed included adverse pregnancy outcomes, eyes and vision, musculoskeletal disorders and skin disorders. The first quote upon which plaintiffs rely was lifted from the WHO's press release, and is directed generally to *potential* health concerns, and not just RSI or carpal tunnel syndrome. Further, the press release language recognizes a *public* awareness of possible health issues regarding VDU use. It is not limited to keyboards. Further, the provisional statement heading "musculoskeletal disorders" from where plaintiffs' limited quote is taken provides:

The working group recognizes that musculoskeletal discomfort is commonplace in VDU work. Injury from repeated stress to the musculoskeletal system is plausible. Such effects have been observed in other jobs. Further research on the potential

[\*168] for injury is warranted. However, the group emphasizes that these conclusions should not be interpreted to mean that musculoskeletal discomfort inevitably leads to injury or is necessarily a sign of injury. It is the view of the working group that musculoskeletal problems in VDU work are largely preventable and that appropriate control measures should be introduced. These include the application of ergonomic principles to the design of the workplace equipment, environment and work organization. Occupational health services play a key role in the early recognition and prevention of musculoskeletal problems in VDU work.

Not only is the quote upon which plaintiffs rely taken out-of-context, but plaintiffs' emphasis is misplaced. When reviewed in its entirety, the reference to musculoskeletal disorders is not limited to the upper limbs, nor directed to a particular condition. No linkage is established between VDU design, in particular keyboard design, and the development of musculoskeletal injury, specifically CTS. In fact, the summary comments only that stress to the musculoskeletal system "is plausible," further research "is warranted" and that the conclusions therein "should [\*169] not be interpreted to mean that musculoskeletal discomfort inevitably leads to injury or is necessarily a sign of injury." Rather than this exhibit proving that use of a VDU or keyboard is a substantial factor in causing carpal tunnel syndrome, it indicates the opposite and recognizes the numerous other contributing factors to the development of musculoskeletal *discomfort*. It does not determine that injury necessarily results from VDU use. There is no suggestion of a causal relationship between keyboard use and injury, of any design defect, or a dangerous condition inherent in VDUs.

#### Exhibit 16.

Identified by plaintiffs as the Pincas report (D.I. 324), this exhibit is a pre-publication draft of Processor Pincas, analyzing the possible legal exposure that could exist to manufacturers of VDTs. It expresses a number of potential harms consistent with computer use, most of which are not the injuries involved in this matter. No attempt is made by Professor Pincas to include the scientific basis for the alleged associated injuries. Nor is it shown that she is qualified to opine on alleged design defects. The article also discusses a variety of possible legal theories, including [\*170] strict liability, which is not applicable in this case. Her analysis only addresses whether, based on her review of case law, liability under some legal theory may arise. Although she may find li-

ability based upon unsubstantiated assumptions, her conclusion is not relevant to the issues addressed herein.

#### Exhibit 17-20.

These exhibits (D.I. 324), along with exhibits 59-63 (D.I. 326), relate to other manufacturers's warnings and will be addressed later herein. Exhibit 17, as with the other documents attributed to IBM, does not amount to an admission of a causal relationship between keyboard use and injury, as so aptly argued by plaintiffs. Further, as discussed previously, none of plaintiffs' experts, in particular Cunitz, ever addressed the type of warning required nor identified, beyond some vague danger surrounding the activity of typing or keying what about these activities is dangerous. Certainly, IBM by exhibit 17 has not admitted to any danger in such activities. Rather, the exhibit provides suggestions for comfort in using a computer terminal -- all of which are common sense suggestions.

#### Exhibits 21 and 22.

The article contained therein (D.I. 326, Ex. 21) is a state-of-the-art [\*171] review by Stephen Zoloth, Ph.D., an individual who, although used to support Punnett's analysis, has not been identified as an expert in this matter, in particular, state-of-the-art. The report is undated and an opinion by a third-party, not an admission by IBM. Further, noted within this document, Zoloth comments from a public health, non-legal view

It is an axiom of Public Health that, long before a causal link can be conclusively demonstrated between a potential risk factor and disease, it is prudent practice to intervene to reduce or eliminate exposure.

D.I. 324, Ex. 21 at 6.

The affidavit of Dr. Pascarelli (D.I. 324, Ex. 22), which plaintiffs submit as evidence that the design flaws contributing to carpal tunnel syndrome as sustained by plaintiffs are common to all QWERTY keyboards, such as the IBM keyboards, is an attempt to introduce expert testimony from a witness who was never previously identified in this litigation to testify on this issue. He has not been subject to deposition and he was not presented for examination by plaintiffs during the *in limine* hearings -- the hearings which plaintiffs demanded to enable them to qualify their propounded experts [\*172] under Daubert/Paoli II, *after* their answering brief was filed. Pursuant to the various scheduling orders, *Fed.R.Civ.P.* 56 and *Fed.R.Evid.* 702, his affidavit is not admissible, and will not be considered by this Court.

#### Exhibit 23.

This exhibit contains part of an article in the publication, *Practical Ergonomics*, alleged to be authored by D. O. B. Dickerson, IBM's former Director of Corporate Health. The copy provided of this document is not only incomplete, the identity of the author and the date of publication is unknown. Plaintiffs' quotes from this article regarding tenosynovitis follow an incomplete sentence regarding "workplace layout," with no apparent reference to keyboard defects. And, no where does the article suggest that the unknown author opined that Kroemer's studies were reliable. Further, the other quotes attributed by plaintiffs to be the opinion of the author are not. Rather, they are merely statements of findings made by others. Therefore, even if this exhibit was authored by Dr. Dickerson, it does not reveal his opinion on design defects, nor a causal connection between keyboard use and RSI. This unauthenticated document is not admissible and shall [\*173] not be considered by this Court.

#### Exhibits 24 and 25.

Exhibits 24 and 25 have been addressed in the discussion concerning exhibit 7. In fact, Exhibit 25 is essentially the same as exhibit 7.

#### Exhibits 26-31.

Plaintiffs' reliance upon these exhibits as evidence of defective keyboard design is misplaced. Some of these materials include comments and suggestions by third parties. Devoid from these exhibits are any statements by IBM regarding a causal connection between the use of its keyboards and carpal tunnel syndrome. These documents discuss matters such as posture, positioning, standing, sitting, overall comfort, workplace set up, footrests and chairs. Even the quotes upon which plaintiffs rely, which the Court must assume were the best plaintiffs could gleam from this massive quantity of paper do not support that the specific IBM keyboards involved in this matter caused carpal tunnel syndrome, that any of its keyboards caused carpal tunnel syndrome, that RSI or carpal tunnel syndrome resulted from defectively designed IBM keyboards or that there were common design defects in all standard keyboards.

Similarly, Exhibit 29, a proposal submitted by a third-party and not authored [\*174] or attributable to IBM, contains a list of various occupational and non-occupational activities and factors which contribute to the development of RSI, such as, "age, gender, vitamin deficiency, size, posture, ergonomics and physical condition."

Like a significant number of exhibits previously addressed, these documents merely comment upon keyboards and some alleged assumption between keyboard use and RSI.

Exhibit 28 contains IBM workers' compensation records submitted in support of causation. A review shows "nothing more than that claims were being made that musculoskeletal complaints were related to keyboard use." Schneck at 53. No keyboard defects are indicated. Plaintiffs reference that these records definitively show that the cause of injury was a "keyboard," thereby proving design defects common to all keyboards is totally without merit. These forms are routinely completed by some unidentified IBM personnel and are usually required by state law. A review of the entire document shows that they are recordings of hearsay statements by a complainant, which became part of an employee's worker's compensation file. There is nothing to support that those forms were reviewed or [\*175] executed or admitted as accurate by a corporate officer from IBM. Nowhere on these forms is there any representation identifying any defect in the keyboard. Nor is there any reference to the keyboards involved in those claims and whether those keyboards were similar to or the same equipment used by plaintiffs. They neither support a finding of causation nor an admission on the part of IBM. Schneck at 54, citing *Karolisyn-Morris v. IBM*, Index. No. 14003/92, mem. op. at 7 (N.Y. Supr. January 31, 1994).

The Schneck court addressed substantially similar (and in some instances, identical) evidence submitted by the plaintiffs in support of their product liability claim. With regard to defendant's internal memoranda proffered to demonstrate the recognition and intentional disregard of the relationship between RSI and IBM keyboard use, the court held "the documents plaintiffs' counsel proffers do not amount to an admission of a causal relationship between keyboard use and injury. If anything, they demonstrate IBM was attempting to sort out the complex issue of what had commonly become known as . . . RSI . . ." See Schneck at 51-57. As for Bowers and Allen's assertion that [\*176] other manufacturers' enclosed warnings about proper keyboard use and risk of injury, when faced with similar materials, Schneck found that "the documents regarding instructions, warnings, and alternative keyboard products of other manufacturers are irrelevant to [plaintiffs'] action against IBM and, hence, are irrelevant to the causation issues central to IBM's motion for summary judgment." Id. at 64. Indeed, Delaware law clearly further supports this proposition. See, e.g., *Bryant v. Delmarva Power & Light Co.*, 1995 Del. Super. LEXIS 438, C.A. No. 89C-08-070, slip op. at 26 (Del. Super. Oct. 2, 1995) ([HN40] industry "custom" does not establish a legal duty). Thus, as in Schneck, this Court finds that plaintiffs have failed to establish the requisite element of causation through submission of the aforementioned documents.

Before more completely addressing plaintiffs' exhibits propounded for the availability of alternative keyboard design, the Court feels compelled to comment upon the morass of materials it waded through in plaintiffs' appendices. Most of these documents have been submitted without any proper foundation, contain hearsay and are irrelevant. In deciding a motion for summary judgment [\*177] under Rule 56, only admissible evidence is to be considered. Drowning the Court in a tidal wave of paper does not mean that a genuine issue of material fact exists.

As in Schneck, plaintiffs' herein have submitted materials regarding instructions, warnings and alternative keyboard products of other manufacturers. D.I. 324-325, Ex. 18-20; D.I. 326, Ex. 59-63. Schneck found such evidence lacking probative value and inadmissible under *Fed.R.Evid. 402*. Schneck at 64.

An issue similar to that presented herein was also addressed in *In re Richardson-Merrell, Inc., Bendectin Prods. Liab. Litig.*, a product liability case involving the prescription drug *Bendectin*. 624 F. Supp. 1212 (S.D. Ohio 1985), aff'd, 857 F.2d 290 (6th Cir. 1988), cert. denied, 488 U.S. 1006 (1989). In Richardson-Merrell, the plaintiffs offered warning labels on nonprescription drugs produced by other manufacturers. *Id.* at 1231. The court excluded those labels as irrelevant:

The threshold requirement of relevancy simply was not met. The fact that warnings were placed on these three over-the-counter (nonprescription drugs) by manufacturers other than the defendant did not make the [\*178] existence of a fact of consequence more or less probable . . . [The evidence] is not germane to the single issue of whether Bendectin causes birth defects.

*Id.* at 1230-31.

In this case, as in both Schneck and Richardson-Merrell, other manufacturers' warning labels have no probative value. The rationales underlying the inclusion of warning labels and/or instructions by other manufacturers, or their production of alternative keyboards, are unknown to this Court. While they *may* relate to safety and causation issues, they could just as likely reflect an action propelled by an overcautious attorney's advice. As such, the probative value of other manufacturers' warning labels is very dubious at best, and the Court must find them inadmissible.

Moreover, even if the other manufacturers attached such warning labels, included instructions with their packaging materials, or developed alternative keyboards premised upon an actual determination of risk and causation relating to their own keyboards, these activities would be meaningless with regard to the risks associated with IBM's keyboards. See Schneck at 66; *Richardson-Merrell*, 624 F. Supp. at 1231 (excluding [\*179] as irrelevant warning labels of other manufacturers because "the warnings on these drugs are ambiguous, at best, when attempting to infer the purpose for which the warnings were designed."). Without the appropriate factual foundation demonstrating the purpose of the warnings, instructions, and alternative keyboards, not to mention the circumstances under which they are provided, such evidence is irrelevant. Id. In light of the discussion herein, those warnings/instructions and alternative keyboard designs by other computer equipment manufacturers which plaintiffs proffer as evidence of causation and IBM's duty to warn are irrelevant and inadmissible pursuant to *Fed. R. Evid. 401* and *402*.

Most significantly, those warning/instruction and alternative keyboard design materials submitted by plaintiffs are inadmissible under the exclusionary hearsay rule, and unredeemed by any hearsay exception. See *Fed.R.Evid. 805*. [HN41] Upon a document proffer, the proponent must establish that both the document itself and the hearsay statements contained therein fit within an exception to the hearsay rule. Id. The materials regarding other manufacturer's warnings, instructions, and alternative [\*180] keyboards are undeniably out-of-court statements proposed by plaintiffs for the truth of the matter asserted -- i.e., that keyboards can cause not only injury, but the injuries in this matter. As such, they are inadmissible hearsay. See *Fed. R. Evid. 803*; *Richardson-Merrell*, 624. F. Supp. at 1232 ("The warnings are out-of-court statements offered to prove the truth of the matters asserted . . . . The warnings are in fact inadmissible hearsay.")

Indeed, the various exhibits submitted by plaintiffs also contain an *additional* layer of hearsay, where included are assertions by unknown people about the risks of keyboard operation. As defendant is unable to cross-examine those people, their statements are inadmissible. See *Cedeck v. Hamiltonian Federal Sav. & L. Ass'n*, 551 F.2d 1136, 1138 (8th Cir. 1988) (statements containing a reiteration of what some unknown person told the declarant were excluded as hearsay); *Carden v. Westinghouse Elec. Corp.*, 850 F.2d 996, 1002 (3rd Cir. 1988) (following *Cedeck*).

The Federal Rules of Evidence on this matter are unequivocal and allowing plaintiffs to introduce the

aforementioned materials would in effect circumvent their obligation [\*181] to establish the qualifications of unidentified people to render expert testimony under *Fed.R.Evid. 702*, and the factual foundation for those opinions under *Fed.R.Evid. 703*, as well as preclude defendant's cross-examination of such experts.

Moreover, no testimony proposed by plaintiffs' experts establishes that any of the alternative designs would have prevented the injuries plaintiffs claim resulted from their use of IBM keyboards. D.I. 310, A-90, 239, 246. Specifically, Dr. Bleeker, plaintiffs' only specific causation expert, admittedly cannot determine whether alternative design keyboards would eliminate, prevent or even reduce incidents of CTS. D.I. 310, Ex. A-90.

Therefore, for all reasons contained herein, the Court must deny admission (and consequent consideration) of all those documents regarding other manufacturers' warnings and instructions related to keyboard use, as well as those documents showing alternative keyboard design, which plaintiffs have proffered. n58

n58 The bases for finding other manufacturers' warnings and instructions and alternate keyboard designs inadmissible are applicable to plaintiffs' other exhibits.

[\*182]

## CONCLUSION

For the reasons contained herein, it is recommended:

1. That defendant's motion to exclude plaintiffs' experts, Drs. Kroemer and Cunitz, on the basis of Daubert/Paoli II standards should be GRANTED.
2. That defendant's motion to exclude plaintiffs' experts, Drs. Punnett and Bleeker should be DENIED.
3. That defendant's motion for summary judgment on plaintiff Bowers' claim as being time-barred by the operation of *10 Del. C. § 8119*, the applicable statute of limitations, should be GRANTED.
4. That defendant's motion for summary judgment on the issues of design defect and duty to warn should be GRANTED. As a result, since plaintiff George Allen's claim is derivative and plaintiffs' claim for punitive damages is not an independent claim, but requires a verdict of compensatory damages in their favor before exemplary damages can be considered and awarded, it is further recommended that plaintiffs' entire action be DISMISSED.